

United States Department of the Interior National Business Center

Alaska Region/Aviation Management

4405 Lear Court Anchorage, Alaska 99502-1032



AM OPERATIONAL PROCEDURES MEMORANDUM (OPM) 06-AR-14

Subject: Alaska Region Aircraft Maintenance System

Effective Date: February 1, 2006

Supersedes: January 5, 2005

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.1 <u>Purpose</u>. To establish operational policy for the Alaska Region's aircraft maintenance system and procedures necessary to maintain airworthy aircraft on a routine and timely basis.

.2 Fleet Services Responsibilities:

A. Fleet Services will:

- (1) Coordinate with requesting agencies to determine type of aircraft and associated equipment necessary to perform particular flight missions.
- (2) Provide Aviation Management (AM) pilots with training and emphasize adherence to procedures and requirements in determining that aircraft flown have been approved for return to service.
- (3) Assure changes are made to the Pilot's Operating Handbook to furnish instruction to pilots on the operation of installed equipment.
- (4) Ensure pilots have recorded proper aircraft information on the OAS-2 because:
 - (a) Various turbine engine components are life-limited, based on either total hours or total cycles, whichever occurs first. Cycles are defined as:
 - (i) Allison (250-C20): A cycle is a start or start attempt;
 - (ii) <u>Garrett</u> (Honeywell) TPE 331: A cycle is an operational sequence; i.e., an engine start, aircraft takeoff and landing,



- (iii) Followed by engine shutdown.
- (iv) <u>Pratt and Whitney PT6-20 and 27/28 Series:</u> (1) A cycle is any flight consisting of one takeoff and one landing; (2) A "touch and go" landing and takeoff.
- (b) Assure that all cycles, as defined above are entered on the OAS-2. Cycles resulting from ground operations of the Allison engine will be entered in the appropriate designated space and this form shall be maintained on a daily basis when the aircraft is in use. All entries are to be made on the OAS-2 in sequential order of occurrence.
- (5) When maintenance is necessary, coordinate with the OAS Repair Station or the assigned vendor facility for scheduling aircraft into maintenance, final inspection, and approval for return to service procedures. Coordination will include:
 - (a) Review logbooks, Airworthiness Directives and other required items and prepare appropriate inspection sheets. All inspections or component maintenance that will fall due during the next 99 hours or 90 days will be entered on the work order.
 - (b) Evaluate discrepancies noted by pilots/maintenance personnel and determine appropriate action.
 - (c) Identify maintenance discrepancies noted during operational flight, record discrepancies on the OAS-2 and forward for maintenance.
 - (d) Notify the user agency when an aircraft is approved for return to service.

B. The OAS Repair Station will:

- (1) Provide aircraft maintenance as requested by Fleet Services.
- (2) Advise Fleet Services on the scope and detail of maintenance required on aircraft assigned to the OAS Repair Station for inspection or repair.
- (3) Provide Fleet Services a current estimate of time for return to service.
- (4) Perform Maintenance on Fleet Aircraft according to the Repair Station Inspection Procedures Manual and 14 CFR.
- (5) When maintenance is completed, the Repair Station will complete the OAS-2 including updating the hours blocks, "Corrective Action", "Inspection(s)" and "Flight Release" blocks.
- (6) Notify Fleet Services when an aircraft is returned to service.
- (7) Return the completed maintenance package to Fleet Services for filing.



.3 <u>Pilot Responsibilities</u>.

- A. Prior to flight, pilots shall have an OAS-2, Aircraft Flight/Use Report book for the aircraft to be flown.
- B. The OAS-2's must be reviewed to determine maintenance status of aircraft prior to flight.
 - (1) Pilots are responsible for oil changes and oil samples except those in conjunction with an inspection, i.e., 100-hour or annual. AM will not authorize payment for oil change between inspections at commercial facilities.
 - (2) Oil change intervals are:
 - (a) Cessna 206, 185, Maule, and PA-18's, Husky's or Scouts equipped with oil filter: each 50 hours.
 - (b) PA-18's, Husky, and Scout equipped with oil screen: each 25 hours.
- C. Pilots shall, after operations in salt water, drain or remove collected water from float compartments or hulls and wash these areas with fresh water upon completion of day's flight activities. Pilot's time will be charged to the using agency.

.4 <u>Inspections</u>.

- A. Except those aircraft being maintained under an approved inspection program or a continuous maintenance program, no Departmental aircraft may be operated unless within the preceding 12 calendar months, it has had:
 - (1) An annual inspection in accordance with 14 CFR Part 43 and has been approved for return to service by a person authorized by 14 CFR Part 43.7.
 - (2) An inspection for issuance of an Airworthiness Certificate.

B. <u>100-Hour Inspection</u>.

A Departmental aircraft may not be operated unless, within the proceeding 100 hours of time in service, it has received an annual inspection or 100-hour inspection and has been approved for return to service in accordance with 14 CFR Part 43. The 100-hour inspection may be exceeded by a maximum of 10 hours <u>only</u> for the purpose of returning the aircraft to a maintenance facility, and <u>only</u> if the flight is approved by the Chief, Fleet Services or the Alaska Regional Director. This time will be subtracted from the next 100-hour inspection time. Users shall notify Fleet Services 14 days prior to requiring an inspection.

- C. Those aircraft operated under an approved inspection program or a continuous maintenance program shall be operated in accordance with the approved program.
- .5 <u>Aircraft Discrepancies</u>. DOI owned/operated certificated aircraft shall comply with 14 CFR 91.213 as follows:



- A. <u>Multiengine Aircraft</u>. Multiengine aircraft shall have a FAA or Associate Director, AM, approved minimum equipment list for each aircraft in accordance with 14 CFR 91.213, subparagraphs (a) and (c).
- B. <u>Turbine-powered Aircraft</u>. Turbine-powered aircraft shall have a FAA or Associate Director, AM, approved minimum equipment list for each aircraft in accordance with 14 CFR 91.213, subparagraphs (a) and (c).
- C. <u>Single Reciprocating Engine Aircraft</u>. Single reciprocating engine aircraft shall be operated and maintained in accordance with 14 CFR 91.213, subparagraph (d). The Chief, Fleet Services must approve all deferred discrepancies.
- D. All discrepancies shall be entered on an OAS-2 as they occur. Entries shall remain on the OAS-2 until corrected in accordance with 14 CFR 43 or deferred and moved to OAS 2 Attachment A. Corrective actions shall be entered on the same OAS-2 that carries the discrepancy.
- E. <u>Deviations</u>. Any deviations to the above must be accomplished in accordance with 14 CFR 91.213 (e).

.6 Aircraft Flight/Use Reports.

- A. An OAS-2 entry will be completed for each flight/engine run. All applicable data will be entered in appropriate spaces of OAS-2 form.
- B. Upon completion of a flight or upon completion of multiple flights on a calendar day and/or pilot duty day, an OAS-2 will be completed; white and blue copies removed and forwarded by the pilot to AM Fleet Services.
 - (1) If the aircraft is operated from Anchorage, the OAS-2 will be turned in to Fleet Services daily.
 - (2) If the aircraft is in the field, the OAS-2 will be forwarded to the Fleet Services weekly.
 - (3) Upon receipt, Fleet Services verifies and corrects total time, coding, etc. and inputs data into the automated maintenance tracking system, and forwards the white original the AM Finance, Boise.
 - (4) If discrepancies are recorded on the OAS-2, it is retained in an active file by "N" number until the discrepancies are entered on a work order for correction.
 - (5) When an aircraft arrives at AM for maintenance with discrepancies, the OAS-2 book shall be delivered to Fleet Services. If the aircraft is of the general fleet and no maintenance is required, the OAS-2 book will remain in the aircraft.
 - (6) When Fleet Aircraft arrive at a maintenance facility, the OAS-2 book will be delivered with the aircraft for correction of discrepancies. Fleet Services will be notified as required in OPM-99-AR-01.



.7 Aircraft Maintenance at Commercial Facilities.

- A. <u>General</u>. AM aircraft will be maintained in a condition of continued airworthiness with a neat and presentable appearance. Only those people who have direct operational control can determine airworthiness and appearance of aircraft. Consequently, pilots will be considered to have primary responsibility for the determination of those factors.
- B. <u>Facility and Individual Qualification</u>. The Chief, Fleet Services will evaluate, counsel and qualify commercial maintenance facilities or qualified individuals for work on AM aircraft. An initial and annual evaluation will be made by an on-site visit. A list of approved facilities/individuals will be kept in Fleet Services.
- C. In coordination with the Chief, Fleet Services, NBC Acquisition Management, may establish a Blanket Purchase Agreement (BPA) or other procurement arrangement with the approved facility or individual to perform maintenance services on AM aircraft. The BPA will designate those individuals authorized to order maintenance services.
- D. Pilots shall ensure that discrepancies are entered on the OAS-2. After maintenance is completed, pilots shall ensure that certificated individuals make entries in the aircraft logs and OAS-2 book describing the work accomplished, along with their signature and certificate number. This signature constitutes an approval for return to service.
- E. <u>Services</u>. Pilots who require maintenance services <u>shall contact</u> the Chief, Fleet Services, outlining the type of services required. If maintenance at commercial facilities is determined to be appropriate for the maintenance services to be performed, Fleet Services will initiate a requisition for that maintenance. The requisition will reference the work order number, describe the work to be accomplished, and provide the recommended facility or individual's name that will perform the work.
 - Aircraft Inspections. Pilots with aircraft requiring annual or 100-hour (1) inspections at commercial facilities will contact the Chief, Fleet Services 14 days prior to obtaining service for authorization and instructions. Inspections shall be accomplished in accordance with applicable manufacturer's instructions, 14 CFR Parts 91 and 43, and AM procedures. At the outset of an inspection, Fleet Services will contact the individual or facility doing the work and furnish a list of applicable airworthiness directives and deferred maintenance discrepancies. Pilots will be responsible to furnish the inspection facility or individual with those discrepancies on Form OAS-2 Attachment A. AM inspection and discrepancy forms or an AM approved equivalent will be used and a completed copy forwarded to AM with the invoice. Applicable airworthiness directives and discrepancies of an airworthiness nature will be resolved directly as a matter of course. Discrepancies of a non-airworthiness nature will be resolved only after consulting with the Chief, Fleet Services. Tachometer time will be used for recording inspection times. When the aircraft has exceeded 100 hours since the last inspection, the excess time must be included in computing the next 100-hour due time. When an aircraft or engine is approved for return to service the certificated individual or facility will sign the statement provided in the flight log or enter a statement in the flight log in accordance with 14 CFR 43.11. Pilots are responsible to ensure that the approval for return to service is appropriately accomplished. An operational flight to confirm the aircraft's airworthiness will be conducted by the pilot and signed off on Form OAS-2 prior to any mission flying.



- (2) General Maintenance and Repairs. Pilots requiring configuration changes or general maintenance will contact the Chief, Fleet Services, for authorization and instructions. Maintenance will be accomplished in accordance with applicable manufacturer's instructions, 14 CFR Parts 91 and 43, and AM procedures. Repair Stations will use the statement provided in the OAS-2 book for approval for return to service. Certificated individuals will make an entry in the OAS-2 book describing the work accomplished along with their signature and certificate number. Pilots are responsible to ensure that the approval for return to service is appropriately accomplished.
- (3) <u>Modifications</u>. Due to the need to maintain continuity and commonality throughout the AM fleet, modifications will be accomplished at the AM Repair Station in Anchorage unless the Regional Director (with recommendations from the Chief, Fleet Services) determines it to be more cost effective to have it done elsewhere.

.8 <u>Operational Flights</u>.

- A. After approval for return to service, U.S. Fish and Wildlife Service and National Park Service aircraft will be operationally checked after 100-hour/annual inspections, configuration changes, and after extended periods of inactivity. The cost of the operational flights will be charged to the using bureau on the OAS-2 form used for the operational flight. An appropriate checklist, from Fleet Services, will be completed and submitted with the OAS-2.
- B. General utility fleet aircraft operational flights will be charged to the aircraft or proportionately, if training is involved. In addition to A. above operational flights shall be conducted in accordance with 351 DM 2.4(A)(2)(m).
- C. Fleet Services will schedule operational flights in the Anchorage area.
- D. Pilots performing operational flights on DOI aircraft will, prior to the flight, review maintenance paperwork for what discrepancies were found and corrective actions, discuss with the Chief, Fleet Services, any special functional check that may be required and identify any deferred items. During the preflight, the pilot is responsible for review of operator's manuals, weight and balance information, and to ensure all documents are on board and up-to-date.
- E. Operational flights to determine that preventive maintenance, rebuilding, or alteration has not appreciably changed the flight characteristics or substantially affected the aircraft's flight operation will be accomplished with a flight crew approved by Fleet Services.
- F. During run-up and flight, each system installed in the aircraft will be functionally checked and results recorded on appropriate AM flight check sheet. Discrepancies will be recorded on OAS-2 and signed off by the pilot.
- G. After completion of the flight, review the results of the flight.



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not meet their type desig	gn becaus	approval of Fleet Services or the Alaska Regional Director, aircraft that do see of accident and temporary repair may be flown to a repair facility. The the necessary flight crew.
.10 Payment. conditions:	Aircraft maintenance costs will be borne by AM only under the following	
A.	The Chi	ef, Fleet Services or the Regional Director has authorized the cost.
В.	The cost must have been incurred at an AM approved facility or with an approved individual.	
C.		rly constituted invoice is submitted to AM. A proper invoice must include owing information and/or documentation:
	(1)	Business name;
		Purchase order number or other authorization for delivery of property or services;
		Description, price and quantity of property and services actually delivered or rendered;
	(4)	Payment terms;
		Name, (where appropriate), title, phone number and complete mailing address of responsible official to whom payment is to be sent. Agency personnel signing that they have received supplies and/or services are required to submit a copy of each work order or receipt for supplies to Fleet Services as soon as practicable;
	(6)	Completed inspection and discrepancy forms.
·	* *	to Perform Maintenance by Commercial Facilities. Approval of facilities nance on AM aircraft may be either suspended or terminated for cause.
OAS-36A, Interagency completion of an Annua	Data Caro Il Inspecti	At the discretion of the Regional Director or Chief of Fleet Services, an d, for an Alaska Fleet aircraft may be renewed based on successful ion by an approved maintenance vendor. The card will be completed by the appropriate user to be placed in the aircraft.
Recommend Approval:		Approved:



/s/ Mark Bathrick

Associate Director

/s/ Harry J. Kieling, Jr.

Regional Director